

Appl. No. 09/890/120  
Amdt. dated February XXXXXXXXXXXX, 2003  
Reply to Office Action of Sept. 23, 2003

Docket No. 034299-000336

AMENDMENTS TO THE CLAIMS:

The listing of claims below will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A semiconductor device formed on a substrate, comprising:
  - a first dynamic threshold voltage MOS transistor having a gate and a channel of a first conductivity type;
  - a first doped zone of the first conductivity type coupled to the channel of said first MOS transistor; and
  - a transistor or diode type current limiter coupled between the gate of said first MOS transistor and said first doped zone, said current limiter comprising a second doped zone of a second conductivity type physically disposed against and in ohmic connection with said first doped zone.
2. (Currently Amended) The device according to claim 1, wherein the transistor or diode type current limiter comprises a second transistor, the second doped zone embodying the source of said second transistor.

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3. (Previously Amended) The device according to claim 2, wherein the second transistor includes a gate coupled to a gate polarization terminal.
4. (Previously Amended) The device according to claim 2, wherein the second transistor has a gate coupled to said second doped zone.
5. (Previously Amended) The device according to claim 4, further comprising a terminal that is coupled to the gate of said second transistor and to the second doped zone.
6. (Previously Amended) The device according to claim 4, wherein a drain of said second transistor is coupled to the gate of the first MOS transistor.
7. (Currently Amended) The device according to claim 1, wherein the transistor or diode type current limiter comprises a diode, the second doped zone embodying a first terminal of the diode and a third doped zone of a conductivity type opposite that of the conductivity type of the second doped zone embodying a second terminal of the diode.
8. (Previously Amended) The device according to claim 7, further comprising a fourth doped zone disposed between the second and third doped zones, said

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fourth doped zone having the same conductivity type as the conductivity type of either the second or third zones.

9. (Previously Amended) The device according to claim 7, wherein the third doped zone is coupled to the gate of the first MOS transistor.

10. (Previously Amended) The device according to claim 8, wherein the diode comprises a gate extending over the fourth doped zone.

11. (Previously Amended) The device according to claim 10, wherein said diode gate is coupled to one of the diode terminals.